

## **DEPARTMENT OF HEALTH & HUMAN SERVICES**

Agency for Toxic Substances and Disease Registry, Region 5 Public Health Service 77 W. Jackson Blvd., Room 413 Chicago, IL 60604

## Memorandum

**Date:** May 25, 2018

From: Michelle Colledge, PhD and Mark Johnson, PhD, DABT

ATSDR, Division of Community Health Investigations, Region 5

**Subject:** Recommendations for additional data collection to support ATSDR health

assessment of community exposures to emissions from AK Steel facility;

Middletown, Ohio

**To:** Ed Nam, Director

Kathryn Siegel, Branch Chief Air and Radiation Division

United States Environmental Protection Agency

77 W. Jackson Blvd., Room 1810

Chicago, IL 60604

U.S. EPA Region 5 has requested public health assistance from ATSDR to evaluate potential public health impacts from emissions from AK Steel facility's coking operation in Middletown, Ohio. During the week of May 14<sup>th</sup>, 2018, EPA Region 5 Air Division staff conducted field sampling using the mobile GMAP system and stationary canister samples. The GMAP system identified significant concentrations of benzene downwind of the coking operation, reporting concentrations in increments of less than 1 minute. Based on these findings, the U.S. EPA R5 Air and Radiation Division consulted with ATSDR on May 17<sup>th</sup> to review the data that had been collected. They asked if the data collected was sufficient for ATSDR to conclude whether there was a public health risk to residents living downwind from this operation.

ATSDR believes that if the data from this preliminary assessment is representative of the ongoing levels of exposure, there may be a concern about health hazards for the community living downwind. However, to provide a more complete basis for a health hazard opinion we are requesting that additional air monitoring data be collected to better characterize ambient levels of benzene and any other contaminants in the residential areas. It is recommended that the additional data include collection of 24-hour average samples in multiple community locations, downwind of coking operations. Also, locating the GMAP in the community to collect continuous data would better inform our understanding of temporal fluctuations in benzene concentrations in the community. Further, ATSDR's assessment would benefit from any data collected by Ohio EPA that U.S. EPA can acquire. Based on the results of this additional

monitoring and other relevant environmental data, ATSDR would have a more informed basis for assessing health risks to this community and would be able provide support for appropriate risk management decisions to protect the health of this community.

Please contact us at 312-886-0840 or via email if there are questions regarding these recommendations.

Sincerely,

Michelle Colledge, MPH, PhD
Environmental Health Scientist

ATSDR- Region 5

Division of Community Health Investigations

Mark Johnson, PhD, DABT

Regional Director ATSDR -Region 5

Division of Community Health Investigations

## CC:

Michael Compher, U.S. EPA George Bollweg, U.S. EPA Marta Fuoco, U.S. EPA Scott Hamilton, U.S. EPA